

State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt Governor Kathleen Clarke Executive Director Lowell P. Braxton Division Director 1594 West North Temple, Suite 1210 PO Box 145801 Salt Lake City, Utah 84114-5801 801-538-5340 801-359-3940 (Fax) 801-538-7223 (TDD)

April 16, 2002

Jerry Holliday Holliday Construction 700 East Brown Canyon Road Box 502 Blanding, Utah 84511

Re: Compiled Mine Plan, Holliday Construction, Inc., Lime Ridge Mine, M/037/081, San Juan

County, Utah

Dear Mr. Holliday:

Last December after I inspected the Lime Ridge Mine, I discussed with you the stipulation on the approval of your permit that you submit a compiled mine plan. You requested my assistance in putting this plan together, so I have gone through the Division's files in an attempt to bring together all of your mine plan submittals. While I believe the information in this package accurately represents the commitments you made in the various submittals, I request that you look through it for any inaccuracies. If you find any errors, please let me know so we can check this plan against your submittals.

Once we have agreed on a mine plan, it needs to be kept current. Any changes to the plan need to be done in a way that they can be inserted directly into the plan. To facilitate this, I can provide you with an electronic version or the information I compiled. I can send this either on a disk or via electronic mail.

Please call me at 801-538-5261 or e mail me at nrogm.pbaker@state.ut.us if you have any questions about this plan.

Sincerely,

Paul B. Baker

Senior Reclamation Biologist

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Enclosure: Mine plan cc: John Blake, SITLA

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FORM MR-LMO (Revised September 2000)

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STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING 1594 West North Temple Suite 1210

Box 145801 Salt Lake City, Utah 84114-5801 Telephone: (801) 538-5291 Fax: (801) 359-3940

NOTICE OF INTENTION TO COMMENCE LARGE MINING OPERATIONS

Division comments about this plan:

The plan presented here is a compilation by the Division of Holliday Construction's original notice of intention and four responses to reviews. In some cases, the operator's response consisted of a hand written comment on a copy of the Division's review. Some of these comments cannot be understood out of context of the review. In these cases, the Division's review comment was included together with the operator's response.

Although the operator's responses and commitments have been compiled in this document, the Division has attempted to make no changes, including grammar and spelling, other than to organize the plan.

I. Rule R647-4-104 - Operator(s), Surface and Mineral Owners

1. Mine Name: Lime Ridge

2. Name of Applicant or Company: Holliday Construction, Inc.

Corporation (X) Partnership () Individual ()

3. Permanent Address: 700 East Brown Canyon Road

P. O. Box 502

Blanding, Utah 84511

Phone: 435-678-2028 Fax: 435-678-3503

4. Company Representative (or designated operator):

Name: <u>Jerry Holliday</u>
Title: <u>President</u>

Holliday Construction
Address: Same as company Phone: Fax:
5. Location of Operation: County(ies) San Juan. T. 41 S., R. 20 E., N½ N½ SW¼ and SW¼ SW¼, Sect. 16, SLBM
6. Ownership of the land surface (circle all that apply): State of Utah (SITLA)
7. Owner(s) of record of the minerals to be mined (circle all that apply): State of Utah (SITLA) Lease 45960-BSLS
8. Adjacent land owners:
9. Have the land, mineral and adjacent land owners been notified in writing? Yes X No
10. Does the operator have legal right to enter and conduct mining operations on the land covered by this notice? Yes X No
II. Rule R647-4-105 - Maps, Drawings & Photographs
105.1 - Base Map
A complete and correct topographic base map (or maps) with appropriate contour intervals must be submitted with this notice showing all of the items on the following checklist. The scale should be approximately 1 inch = 2,000 feet (preferably a USGS 7.5 minute series or equivalent topographic map where available). The map(s) must show the location of lands to be affected in sufficient detail to allow measurement of the proposed area of surface disturbance.
SEE APPENDIX I
105.2 - Surface Facilities Map

SEE APPENDIX II

Surface Facilities Map Checklist

Figure 1 is a current (9-1-00) map showing all disturbances and activities conducted on the Lime Ridge site. A Trimble GeoExplorer II Global Position System was used to determine the area of the impact site and mining areas. These data were differentially corrected and the overall accuracy of these data is +/- 1 meter. The total acreage of the site is 11/48 acres/

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Within this larger area there are three different mining sites, A, B, and C. Sites A and C are areas where past mining activities have taken place and site B is the area where present mining operations are taking place. The total linear acreage of these three sites is 4.59 acres. Mining operations are scheduled to be completed by 30 November 2000 and no future mining activities are planned at this time. For questions or further clarification please contact Todd Black @801-220-4305.

105.3 - Additional Maps

SEE APPENDIX III

Figure 2 is a map showing cross sections selected at various points throughout the mining area to best represent current and past mining activities conducted on the Lime Ridge site. On September 2, 2000, a Trimble GeoExplorer II Global Positioning System (GOS) was used to determine location and elevation (in meters) of each of the surveyed points. These data were differentially corrected and the overall accuracy of these data is +/- 1 meter. Two cross sections were run from west to east for a total of 11 elevation points and three cross sections were run north and south for a total of 17 elevation points. For questions or further clarification please contact Todd Black @801-220-4305.

III. Rule R647-4-106 - Operation Plan

106.1 - Mineral(s) to be mined: Limestone and gravel

106.2 - Type of Operation Conducted: <u>Crushing. Mining 24" riprap for a dam in New Mexico.</u> Equipment being used is an excavator, loader, air track and screen.

Describe the typical methods and procedures to be used in mining operations, on-site processing and concurrent reclamation. Include equipment descriptions where appropriate.

- 1 980F Rubber Tire loader
- 1 980C Rubber tire loader
- 1 966 Rubber tire loader
- 1 DaeWoo excavator
- 1 Hydraulic Hammer on DaeWoo
- 1 Air Track Drill
- 1 Riprap machine with screen and feeder.
- 2 Delivery belts
- 1 Generator

Blasting lightly approximately 10 holes a week. Then we shoot as lightly as possible to make as big as rock as possible. Wee feed the riprap machine with the 2 biggest loaders and use the little loader to stockpile the waste. We do approximately 200 to 250 ton a day.

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Acreage listed here should match areas measured off the maps provided.

Areas of actual mining:	10
Overburden/waste dumps:	0
Ore and product stockpiles:	<u> 6 </u>
Access/haul roads	0
Associated on-site processing facilities:	1
Tailings disposal:	0
Other - Please describe	
Total Acreage	17

(Division review comment: The notice states that "no further mining operations are planned at this time." However, under section 110.1, it is stated that you presently have an additional contract for an additional 3,5— tons of material for next year. Please explain these conflicting statements.)

Operator response to review comment: The rock is already shot and made and there will be no expansion beyond the total plan.

106.4 - Nature of material including waste rock/overburden and estimated tonnage

Describe the typical annual amount of the ore and waste rock/overburden to be generated, in cubic yards. Where does the waste material originate? What is the nature of the overburden/wastes (general chemistry/mineralogy and description of geologic origin)? Will it be in the form of fines or coarse material? What are the typical particle size and size fractions of the waste rock?

Thickness of overburden:	0		ft.
Thickness of mineral deposit:	Unknown 10)?	ft.
Estimated annual volume of overburden:	0	cu.	yds.
Estimated annual volume of tailings/reject materials:	0	cu.	yds.
Estimated annual volume of ore mined:	_40,000_	cu.	yds.
Overburden/waste description: Limestone and there is no o	overburden S	Surface	<u> </u>

mining

Mining 50,000 ton this year and it is not annual. Just whenever the demand hits.

106.5 - Existing soil types, location of plant growth material

Soil samples were selected at 10 locations around the impact site. These soil samples were combined together and sent to Utah State University Soils Lab for analysis. This is done per request from the Division and per conversation with Todd A. Black on the 29th of August with DJ and AG. Soil will be analyzed as per the "Baseline Soils and Overburden provided by the

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<u>Division</u>. Once data is analyzed, a copy of these analysis will be sent to the <u>Division</u> for fertilizer recommendations during the reclamation process.

106.6 - Plan for protecting and redepositing existing soils

Thickness of soil material to be salvaged and stockpiled: 1" in some areas inches

Area from which soil material can be salvaged: (show on map) _____ acre

About 600 cu. yds.

(cross reference with item 106.5 (a))

Ground Cover

Describe how topsoil or subsoil material will be removed, stockpiled and protected.

Cat and loader will put it in a pile at the edge of the mining area where it will be out of the way.

These measures are unnecessary because there is no danger to live stock or humans for it's in an isolated area. Would like to make arrangements with the San Juan County to try to sell to them to use for the roads in San Juan County.

(<u>Division review comment</u>: please seed the topsoil stockpile with the reclamation seed mix to use vegetation to stabilize the soil materials from erosion during storage. Please place a sign identifying the stockpile as topsoil for use in final reclamation only, so this material is not mistakenly disturbed.)

Operator response to review comment: Making sign today. There is around 1000 tons.

106.7 - Existing vegetative communities to establish revegetation success

(a) <u>Vegetation Survey</u> - The following information needs to be completed based upon the vegetation survey:

Sampling method used <u>Ocular estimation from 10 10 m² plots</u>
Number of plots or transects (10 minimum)

Percent

<u> </u>	
Vegetation (perennial grass, forb and shrub cover)	30%
Litter	0%
Rock/rock fragments	<u>20%</u>
Bare ground	<u>50%</u>
-	100%
Revegetation Requirement	
(70 percent of above vegetation figure)	<u>70</u> %

Indicate the vegetation community(ies) found at the site.

List the predominant perennial species of vegetation growing in each vegetation community type.

Shrubs: Blackbrush forb: Winterfat

Cliff Rose	Grasses: Gramma Grass		
Shadscale	Hairy Galleta		

(b) Photographs - The operator may submit photographs (prints) of the site to show existing vegetation conditions. These photographs should show the general appearance and condition of the area to be affected and may be utilized for comparison upon reclamation of the site. Photographs should be clearly marked as to the location, orientation and the date they were taken.

SEE APPENDIX IV

106.8 - Depth to groundwater, overburden material & geologic setting

The proposed mining is not expected to intercept ground water. There is no water in the area. The river is two miles southwest of us.

The estimate of the overburden material [being stored on the site] is around 2000 tons.

106.9 - Location and size of ore and waste stockpiles, tailings and treatment ponds, and discharges

All reject materials or fines from crushing operations will be sold as product.

Some of the material will be used to reclaim with. The other material that can be used to sell for making roads with we will try to sell it to the San Juan County for future use. True we are going to use the 10,000 ton for reclamation at the end of this year for safety reasons. The over burden will be used to reclaim. All other material that can be used will be used to reclaim and it may exceed over 10,000 ton.

IV. R647-4-107 - Operation Practices

Describe measures taken to minimize hazards to public safety during mining operations regarding:

the disposal of trash, scrap metal, wood and extraneous debris;

We haul the trash home every night; no trash is deposited on the site.

the plugging or capping of drill, core or other exploratory holes;

There are no drill holes to plug.

the posting of appropriate warning signs in locations of public access to operations;

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(<u>Division review comment: Because the site is located on a county road, please post warning signs warning the public of heavy equipment operating in the area, or explain why this type of warning is unnecessary for public safety.)</u>

Operator response to review comment:: We will find signs and post them.

Joey will order signs today.

the construction of berms, fences or barriers above highwalls or other excavations.

Using a berm. We have placed a berm along the road and a wall on the other side it's a single lane road.

We have most of the highwalls rehabed. The county road is done.

<u>During times of inactivity we have big boulders around to minimize the public hazard of the open pit when equipment is not on site.</u>

If any of these safety measures are unnecessary, please explain why.

Describe measures taken to avoid or minimize environmental damages to natural drainage channels which will be affected by this mining operation.

No drainage. If there is any rain, it would go into the pit.

There is very little drainage. But will plan to put a culvert in where it crosses the county road. There is no outlet through little pond, more than takes care of it.

Describe measures taken to control and minimize sediment and erosion on areas affected by this mining operation. Describe measures being taken to prevent sediment from leaving the disturbed area.

There is no rainfall in this area and it's just rock.

Identify any potentially deleterious materials that may be stored on site (including fuel, oil, processing chemicals, etc.) and describe how they will be handled and stored.

There is no fuel on the site. The [generator] has a 500 gal fuel tank that runs it stored.

Describe the measures taken to salvage and store soils to be used in reclamation.

(Division review comment: Overburden materials and fines should be saved for reclamation so that a minimum of one foot depth of material is provided for seedling establishment. The overburden materials may require amendments to make them suitable as a plant growth medium. Please provide an analysis of this overburden material using the same parameters as listed for the soils analysis under Section 106.5 [texture, pH, EC, CEC, SAR, organic matter, total N, available phosphorous as P₂O₅, and potassium as K₂O.])

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(Operator response) Been taking the overburden material and stockpiling it for reclamation. Have about 10,000 tons already.

Describe how stockpiled topsoil will be protected from erosion and further impact.

Please describe any reclamation to be done during active mining operations prior to final closure. Reference these areas on a map.

V. Rule R647-108 - Hole Plugging Requirements

All drill holes which will not eventually be consumed by mining must be plugged according to the methods listed in this section. Describe the location of any aquifers encountered by drilling and the method to be used to plug such water containing holes. Describe the method to be used for plugging holes not containing water.

VI. Rule R647-109 - Impact Statement

109.1 - Surface and groundwater systems

Describe impacts to surface or groundwater which could be caused by this mining operation. Describe how these impacts will be monitored and mitigated. The appropriate groundwater and stormwater control permits need to be obtained from the Division of Water Quality. Please reference any such permits.

109.2 - Wildlife habitat and endangered species

Describe the impacts on wildlife habitat associated with this operation. Describe any impacts to big game species found in the area. Describe any impacts to riparian areas. Describe any impacts this operation will have on waterfowl (fly-over, temporary resident or permanent resident). List any threatened or endangered wildlife species found in the area. Describe impacts to threatened or endangered species and their habitats. Describe measures to be taken to minimize or mitigate any impacts to wildlife or endangered species.

See exhibit. None was found.

The surveys to determine the presence of any T&E species of flora or fauna were conducted by Todd A. Black (Twin Peaks Outfitters). In his initial report Mr. Black states, "from observations made during this assessment no threatened or endangered species of wildlife or plants were observed on the proposed impact site or the adjacent properties" surveyed. He further stated, "Whereas no T&E species were recorded during this period, an impact on any T&E species on the proposed impact site is unlikely to occur and a finding of no significant impact on any T&E species of flora or fauna can be implied." No where in his report did he state, "no threatened and endangered species are present at this site".

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Mr. Black has BS from Brigham Young University in Wildlife Biology and a MS from Utah State University in GIS and Remote Sensing. He has conducted additional surveys and acted as an Environmental Consultant for other private consulting companies and has worked with the DWR and USFS in the state of Utah. Please find his resume attached with this document (attachment 2).

109.3 - Existing soil and plant resources

Describe impacts to the existing soil and plant resources in the area to be affected by mining operations. Describe impacts to riparian or wetland areas which will be affected by mining. Describe impacts to threatened or endangered plant species. Describe measures to be taken to minimize or mitigate any impacts to soil and plant resources.

109.4 - Slope stability, erosion control, air quality, public health & safety

Describe the impacts this mining operation will have on slope stability, erosion, air quality, public health and safety. Include descriptions of highwall and slope configurations and their stability. Air quality permits from the Utah Division of Air Quality may be required for mining operations. Please reference any such permits. Describe measures to be taken to minimize or mitigate impacts to slope stability, erosion, air quality, or public health and safety.

Been watering screening area twice a day with our 4000 gal water tank.

We have talked with Susan with Air Quality and she is working on this for us. See attached letter.

VII. Rule R647-4-110 - RECLAMATION PLAN

110.1 - Current land use and postmining land use

The contract we have with the Bureau of Reclamation should be finished by September 30, 2000. But we got an extension for November 30, 2000. We do have another contract with Navajo Engineer Contracting for 3500 ton for next year. Anything to do with limestone we plan on bidding on and using the product out of this pit.

It will be used for grazing and wildlife habitat.

Current or prefixing land use(s) [other than mining]: See Attachment

List future post-mine land-use(s) proposed: See Attachment

(Develop the reclamation plan to meet proposed post-mine land use.)

110.2 - Reclamation of roads, highwalls, slopes, leach pads, dumps, etc.

Describe how the following features will be reclaimed: roads, highwalls, slopes, impoundments, drainages and natural drainage patterns, pits, ponds, dumps, shafts,

adits,8 drill holes and leach pads. Describe the configuration of these features after final reclamation. Describe the rinsing and neutralization of leach pads associated with final decommissioning.

Our whole pit is in a drainage area. There is no problem for drainage.

Figure 3 map shows areas to be reclaimed once mining operations are finished. The pits where material was removed (represented by horizontal crosshatches) will be filled with the reject material as stockpiled on site and covered with a minimum one inch of topsoil and re-seeded with the same seed mix. The ephemeral stream, which runs through the pit, will be restored to as much as it can to its original flow direction. A culvert would be placed through the county road allowing water to flow under the road. One week prior to the September 1 visit a heavy rain was recorded in the area and rains actually filled up the pit (Figure 4). Holliday Construction and consultant feel it may be good to leave some sort of water catchment or pond in the existing pit. This would benefit wildlife and livestock in the area as the pond would fill upon receiving large amounts of precipitation. Once mining activities are complete this idea would need to be further evaluated to determine feasibility and practicality. Holliday Construction and Mr. Black would like to receive consultation with the Division upon completion of mining activities so that reclamation activities will meet all the needs and be suitable to the Division.

There will be no highwalls. Will use the overburden that we stripped to reclaim with, not the topsoil.

(<u>Division review comment: Will all overburden and products stockpiles be used as backfill during final reclamation or will some of this material require regrading in place?</u>)

Operator response to review comment: No. Estimate of the volume of stockpiled materials which will be require regrading is 25,000 tons.

110.3 - Surface facilities to be left

(Division review comment: With the exception of the county road which traverses the site, the submission implies that all other mining will be reclaimed. Please confirm this understanding.)

Operator response to review comment: Yes. It will be reclaimed.

110.4 - Treatment, location and disposition of deleterious materials

Describe the nature and extent of any deleterious or acid forming materials located on-site. Describe how these materials will be neutralized, removed, or disposed of on site. Describe how buildings, foundations, trash and other waste materials will be disposed of.

110.5 - Revegetation planting program and topsoil redistribution

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(The seed mix recommended by the Division is acceptable. This seed mix is attached.)

Attachment 1. Recommended seed mixture to be used in Lime Ridge reclamation efforts.

Common name Luna pubescent wheatgrass Indian ricegrass	Species Agropyron trichophorum Oryzopsis hymenoides	Rate lbs/acre 2.0 4.0
Yellow Sweetclover Palmer Penstemon Winter fat	Melilotus officinalis Penstemon palmeri Ceratoides lanata	0.5 1.0 0.5
Black sagebrush Cliff Rose 4-wing saltbush Shadscale Forage Kochia	Artemisia nova Cowainia mexicana Atriplex canescens Atriplex confertifolia Kochia prostrata	1.0 1.5. 1.0 2.0 1.0
	Total seed 14.5/acre	

(Division review comment: A review of the soils data reveals that the soil materials are low in phosphorous and organic matter. To correct these deficiencies, it is recommended that 50 lbs. per acre of phosphate fertilizer and 15 tons per acre of composted manure be applied to amend the soil materials to assure revegetation success. Please agree to incorporate the soil amendment into the reclamation plan or provide justification for their omission.)

Operator response to review comment: We agree to do this.

R647-4-111.1 Public safety and welfare

When we do high walls we plan on putting a berm to warn the public of the hazards.

R647-111.7 Highwalls stabilized at 45° or less.

We agree to backfill all highwalls to 45 degrees.

The material we plan to use for backfilling is the reject material between the limestone that was left. The reject material is in a stockpile and we will use the loader and dozer to spread it around.

R647-4-111.7 Topsoil redistribution

(Division review comment: It is suggested that the topsoil be placed in islands scattered throughout the reclaimed areas. These soil islands would be a minimum of six inches deep.

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Operator response to review comment: We agree to do this.

We will use the topsoil and place it in islands and scatter throughout the reclaimed areas. These islands will be 6" deep and we will use the fertilizer and composted mulch.

VIII. Rule R647-4-112 VARIANCE

IX. Rule R647-4-113 - SURETY

A Reclamation surety must be provided to the Division prior to final approval of this application. In calculating this amount, include the following major tasks:

- 1) Clean-up and removal of structures.
- 2) Backfilling, grading and contouring.
- 3) Soil material redistribution and stabilization.
- 4) Revegetation (preparation, seeding, mulching).
- 5) Safety gates, berms, barriers, signs, etc.
- 6) Demolition, removal or burial of facilities/structures, regrading/ripping of facilities areas.
- 7) Regrading, ripping of waste dump tops and slopes.
- 8) Regrading/ripping stockpiles, pads and other compacted areas.
- 9) Ripping pit floors and access roads.
- 10) Drainage reconstruction.
- 11) Mulching, fertilizing and seeding the affected areas.
- 12) General site clean up and removal of trash and debris.
- 13) Removal/disposal of hazardous materials.
- 14) Equipment mobilization.
- 15) Supervision during reclamation.

To assist the Division in determining a reasonable surety amount, please attach a reclamation cost estimate which addresses each of the above steps. The areas and treatments included in the reclamation treatments map should correspond with items included in the reclamation cost estimate. The reclamation costs used by the Division must be third party costs.

Attachment I

Vegetation Cover Sampling

Vegetation cover sampling determines the amount of ground that is covered by live vegetation. It is divided into four categories which equal 100 percent. They are:

<u>Vegetation</u> - This is the live perennial vegetation. Care should be taken to avoid sampling in disturbed areas that have a large percentage of annual or weedy vegetation, such as cheatgrass and russian thistle.

<u>Litter</u> - This is the dead vegetation on the ground, such as leaf and stem litter.

Rock/rock fragments - This is the rock and rock fragments on the soil surface.

Bare ground - This is the bare soil which is exposed to wind and water erosion.

Cover Sampling - The following methods are acceptable:

Ocular Estimation

This method visually estimates the percentage of ground covered in a plot by the four components. Plot size is usually a meter or yard square or a circular plot 36 inches in diameter. Ten to twenty plots should be randomly sampled in each major vegetation type.

Line Intercept

Percent ground cover is obtained by stretching a tape measure (usually 100') over the ground and then recording which of the four components is under each foot mark. At least ten of these transects should be randomly laid out and measured in each major vegetation type.

Soil Survey and Sampling Methods

If a SCS or land management agency soil survey is not available, the operator shall delineate all soil types that will be disturbed by mining on a map. Each soil type shall be sampled for its characteristics and inherent properties. Representative sampling locations should have similar geologic parent material, slopes, vegetative communities and aspects. The sampling locations should be representative of the soil type and be identified on the map. Sampling shall be at a minimum of one for each soil type disturbed.

The soil map needs to be of sufficient scale so that each soil type can be accurately located on the ground.

Appendix 1 Addresses item 105.1 - Base Map

(A) Property boundary of surface ownership of all lands which are to be affected by mining operations.

The land where the proposed impact site will be conducted is owned by the State of Utah and managed by the Division of Forestry, Fire and State Lands. Legal description is as follows; Township 41 South Range 20 East, and part of section 16, San Juan County Property can be located on the following 7.5minute United States Geological Survey map 'San Juan Hill' (see Base Map).

(B) Perennial, intermittent, or ephemeral streams, springs and other bodies of water; roads, buildings, landing strips, electrical transmission lines, water wells, oil and gas pipelines, existing wells or bore holes, or other existing surface or subsurface facilities with in 500 feet of proposed mining operations.

There is an ephemeral stream located some 100 feet to the southwest of the proposed impact site. This stream is only active in times of heavy precipitation. A county maintained road (San Juan County Road 2351, Lime Ridge) also runs through the site (Figure 1) and will be used to haul materials from the proposed impact site (see Base Map).

- (C) Proposed rout of access to the mining operations from the nearest publicly maintained highway. Proposed impact site will be accessed off of Utah SR 163 and San Juan County Road 2351, Lime Ridge (Base Map).
- (D) Known areas which have been previously impacted by mining or exploration activities within the proposed land affected. There has been no previous activities of mining or oil and gas operations on the proposed impact site. However, adjacent areas outlined in a red hash mark (Base Map) show an area

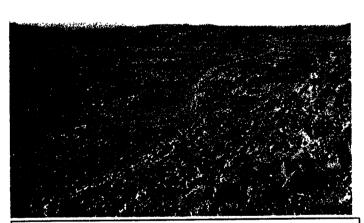
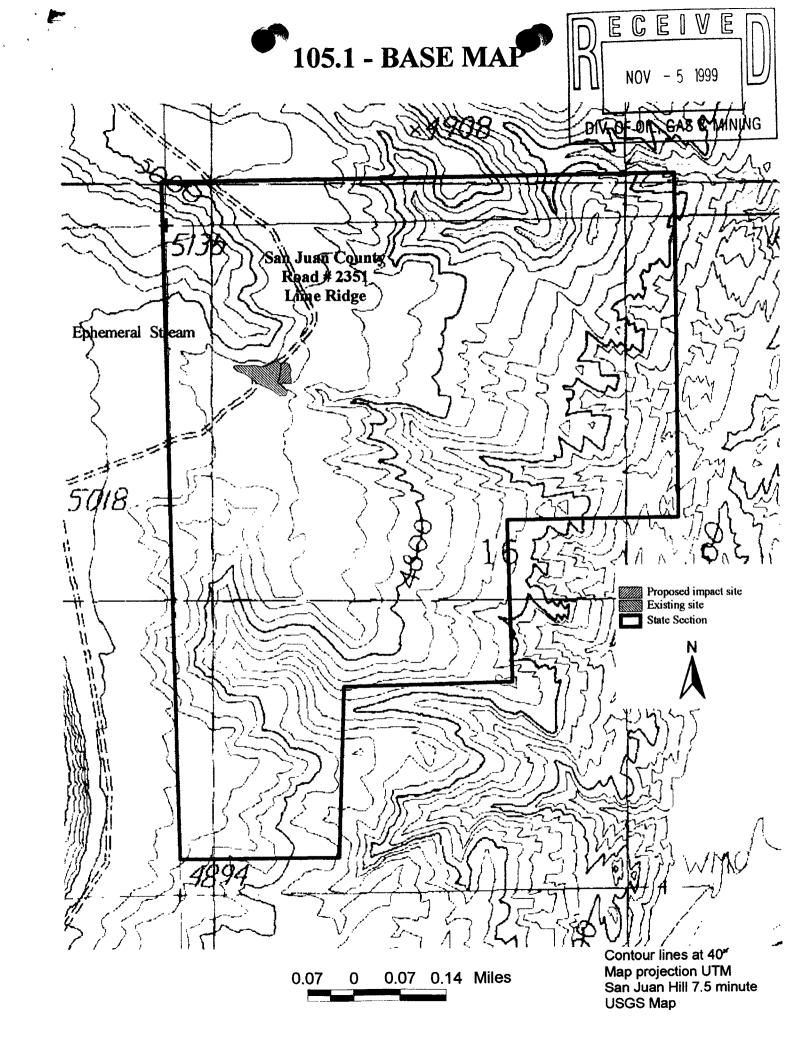


Figure 1. Picture shows San Juan County maintained Lime Ridge Road which runs through the current impact site.

where previous mining operations have taken place in subsequent years.

(E) Areas proposed to be disturbed or reclaimed over the life of the project or other suitable time period. Areas where proposed impact are to be conducted are outlined in green hash marks (Base Map) and will be reclaimed and revegetated upon completion of mining activities.



Appendix 2 Addresses item 105.2 - Surface Facilities Map.

(A) Proposed surface facilities, including but not limited to: buildings, stationary mining/processes, equipment, roads, utilities, power lines, proposed drainage control structures, and the location of topsoil storage areas, overburden/waste dumps, tailings, or processed waste facilities, disposal areas for overburden, solid and liquid wastes, and wastewater discharge treatment and containment facilities.

There are no structures or facilities placed on the proposed impact site nor will any structures or facilities be placed on proposed impact site. All equipment will be located on existing impact site. Topsoil will be pushed aside (Figure 2 and Surface Facilities Map) and piled up so that it can be eaisly pushed over the area once the proposed activities are complete.

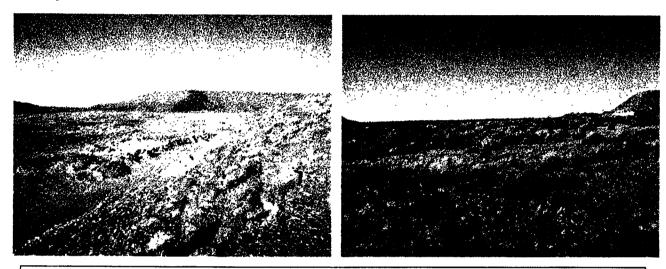
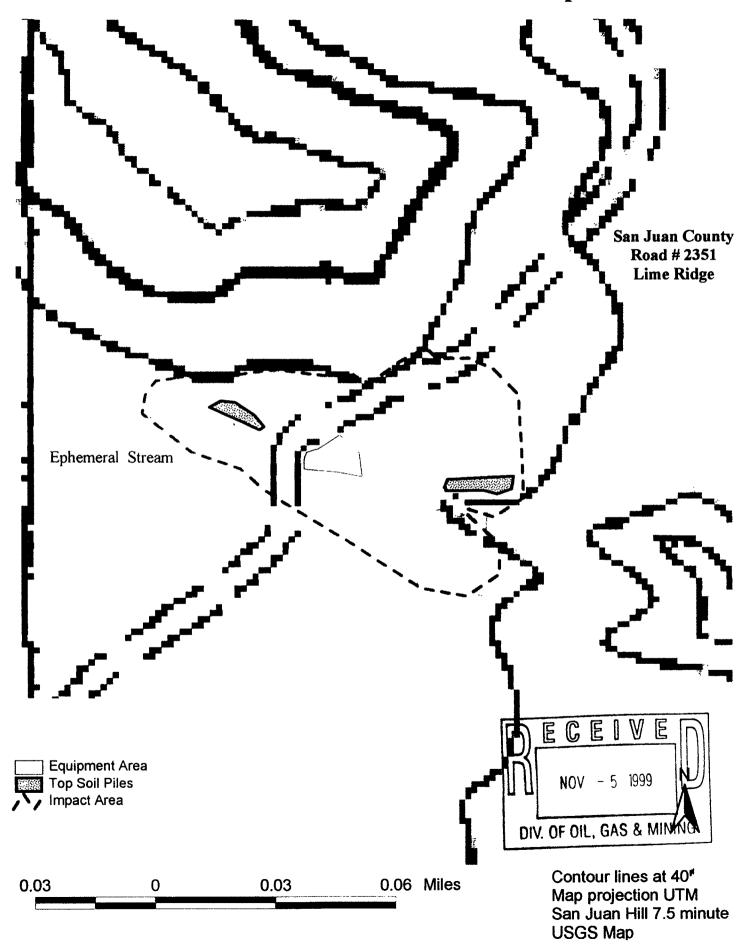
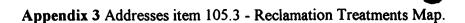


Figure 2. The picture on the left shows area of previous activities. As the picture indicates the topsoil (show in a green checkered patter on Surface Facilities Map) from this area has been stocked piled in a burm located in the center of the picture. The picture of the right is the proposed area of impact.

- (B) A border clearly outlining the extent of the surface area proposed (See Surface Facilities map) to be affected by mining operations, and the number of acres proposed to be affected. The proposed impact area is outlined with a red dashed line and comprises approximately 12 acres (See Surface Facilites Map).
- (C) The location of known test boring, pits, or core holes. None exist and no work of this type will be done on the proposed impact site.

105.2 - Surface Facilities Map





(A) Areas of the site to receive various reclamation treatments shaded, cross hatched or color coded to identify which reclamation treatments will be applied. Areas would include: buildings, stationary mining/processes, equipment, roads, utilities, power lines, proposed drainage control structures, and the location of topsoil storage areas, overburden/waste dumps, tailings, or processed waste facilities, disposal areas for overburden, solid and liquid wastes, and wastewater discharge treatment and containment facilities. Reclamation treatments may include ripping, regrading, replacing top soil, fertilizing, mulching, broadcast seeding, drill seeding, and hydro seeding.

The area to be reacclimated will include areas where topsoil has been removed and mining activities have taken place. The area will have the topsoil spread back across the area and a seed mixture will be broadcast across the site (Figure 3).

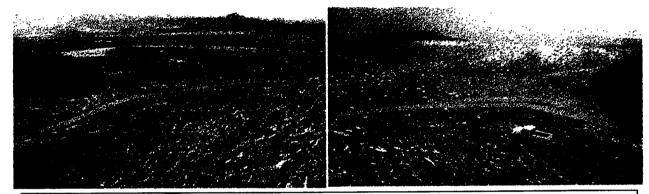
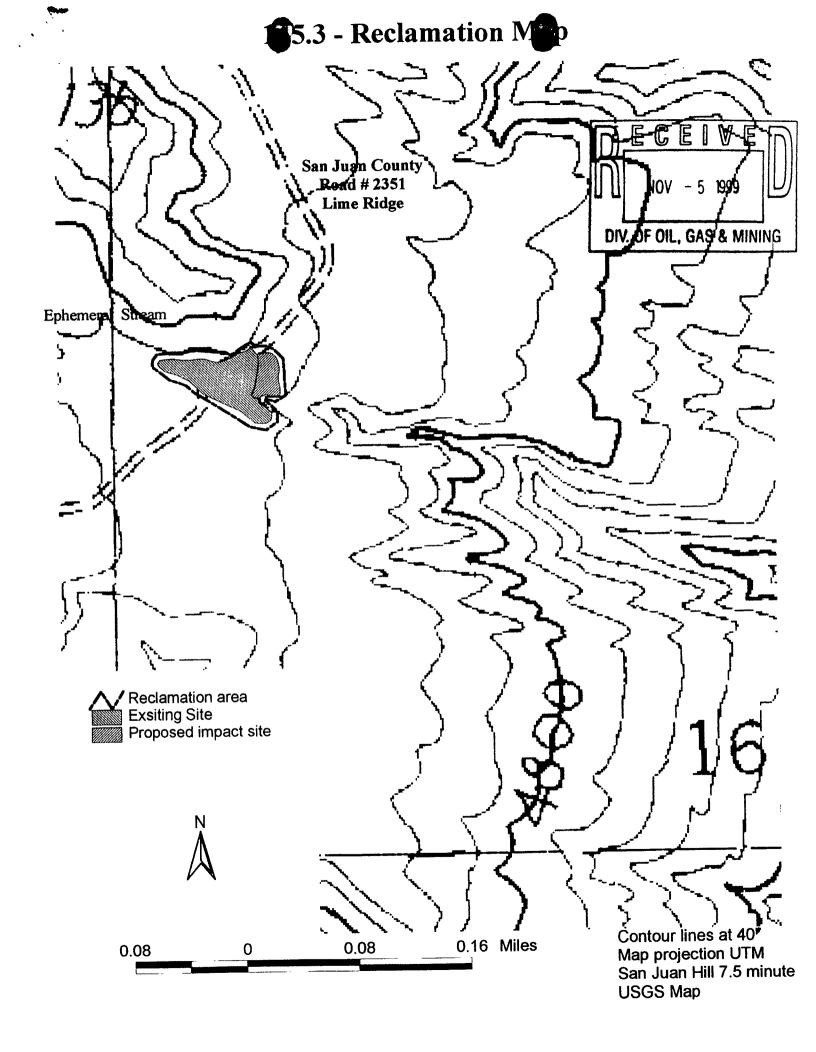


Figure 3. Picture on the right shows area of previous impact to be revegetated and reclimation activities to be conducted. The picture on the right shows the area of the proposed imact site.

(B) A border clearly outlining the extend of the area to be reclaimed after mining, the number of acres disturbed, and the number of acres proposed for reclamation.

The proposed impact area is outlined with a black dashed line (See Reclimation map) and comprises approximately 12 acres. The area to be reclaimed would include the same 12 acres and additional areas from previous activities comprising approximately 15 acres. These areas are outlined in a black dashed line.

- (C) Areas disturbed by this operation which are included in a request for a variance from the reclamation standards. NONE are requested.
- (D) Highwalls which are proposed to remain steeper than 45 degrees and slopes which are proposed to remain steeper than 3 horizontal: 1 versicle. NONE.



Appendix 4 Addresses item 106.7 and 109.3 - Existing vegetative communities to establish revegetation success

SITE LOCATION

The proposed impact site is located approximately 10 kilometers West/Southwest of Bluff, San Juan County, Utah off of State Route (SR)163 on San Juan County Road 2351, Lime Ridge. In the past, this site has been used for the removal and processing of

lime stone (out lined as a red hash mark polygon in Base Map). The proposed impact site is located in the Northwest quarter section of section 16, Range 20 East, Township 21 South and covers approximately 12 acres. The site is located on a bench above the San Juan River and below several small bluffs located in the area (outlined as a green hash mark



Figure 4. Picture of proposed impact site taken from the eastern extent of the site looking west. Picture also shows the vegetation which exists on the site.



Figure 5. Picture shows the San Juan River in the distance as well as Comb Wash Canyon comming into the picure from the upper left.

in Base Map). The site can be generally characterized as a desert environment (Figure 4) with sparse vegetation growing on site. The site ranges in elevation from 4930' to the east and 4960 to the west. Vegetation on the site is dominated by black brush (Coleogyne ramosissima), Mexican Cliff rose (Cowania mexicana), blue gramma grass (Bouteloua gracilis), and hairy galleta (Hilaria jamesii). East of the site slopes of gently until it

drops into Comb Wash Canyon. To the south (~1.8km) on Bureau of Land Management Lands lies the San Juan River (Figure 5).

METHODS

An ocular estimation method was used to determine plant species composition, percent cover, and sample plant species diversity on the proposed impact site. A total of five 10m square plots were randomly select on the proposed impact site and five 10m square plots were selected to the south, north, and east of the proposed impact site. Plant species were recorded as a percentage at each site as well bare ground percent

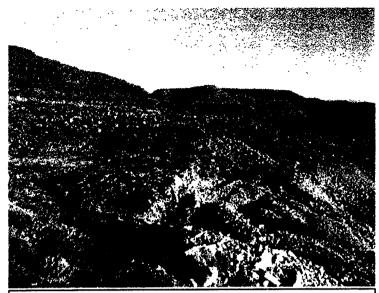


Figure 5. Picture showing the various vegetative and non-vegetative cover of the area.

cover, rock and litter percent cover so that each site totaled 100 percent of vegetative and non-vegetative cover (Figure 5). These sites were averaged and an overall vegetative non-vegetative percent cover for the general area was determined as follows; 50% bare ground/gravel, 20% rock, 20% shrubs, and 10% grasses and forbes (Figure 5). Additional line transects were walked in and around the proposed impact site to determine additional species of wildlife. These species were recorded by visual observations, tracks surveys, and fecal surveys

FINDINGS

A total of 17 species of plants and 5 species of fauna (Table 2) were recorded on the proposed impact and adjacent. From observations made during this assessment no threatened or endangered species of flora or fauna were observed on the proposed impact site or the adjacent properties. Whereas no T&E species were recorded during this period, an impact on any T&E species on the proposed impact site is unlikely to occur and a finding of no significant impact on any threatened or endangered species of flora or fauna can be implied.

Table 2. List of flora and fauna found on the proposed impact site and adjacent properties. Those species found on the proposed impact site are marked with and asterisk (*).

Flora Fauna	Common Name	Genus Species	Forb (F) Grass (G) Shrub (S) Tracks (T) Scat (D) Visual (V)	Abundance (H) High (M) Medium (L) Low (T) Trace (U) Unknown	Native (N) Non-native (I)
plant	*Russian thistle	Salsoa iberica	F	Ĥ	I
plant	*Snake Weed	Gutierrezia sarothrae	S	Н	N
plant	*Birds Beak	Cordylanthus wrightii	F	М	N
plant	June Grass	Bromus techorum	G	Н	I
plant	*Indian Rice Grass	Oryzopsis hymenoides	G	M	N
plant	*Mormon Tea	Ephedra viridis	S	М	N
plant	*Sagebrush	Artemisia tridentata spp.	S	L	N
plant	*Rubber Rabbitbrush	Chrysothamnus nauseosus	S	Н	N
plant	* Mexican cliff rose	Cowania mexicana	S	M	N
plant	Fourwing Saltbrush	Atriplex canescens	s	M	N
plant	*Winter fat	Ceratoides lanata	F	Т	N
plant	*Evening Yucca	Yucca bacata	S	L	N
plant	*Shadscale saltbrush	Atriplex confertifioia	S	М	N
plant	*Barrel cactus	Opuntia spp.	S	Т	N
plant	*Prickly pair cactus	Opuntia spp.	S	Т	N
plant	*Blue Grama grass	Bouteloua gracilis	G	Т	N
plant	*Hairy Galleta	Hilaria jamesii	G	М	N
Bird	*Horned Lark	Eremophila alpestris	V		N
Bird	*Lesser Goldfinch	Carduelis psaltria	V		N
Bird	Prairie Falcon	Falco mexicanus	V		N
Mml	*Mule Deer	Odocoileus hemionus	D/T		N
Mml	*Cottontail rabbit	Sylvilagus spp.	V		N
Mml	Black-tailed jackrabbit	Lepus californicus	Т		N
Mml	*Kangaroo rat	Dipodomys spp.	Т		N
Mml	*Grey Fox	Urocyon cineroargenteus	D/T		N

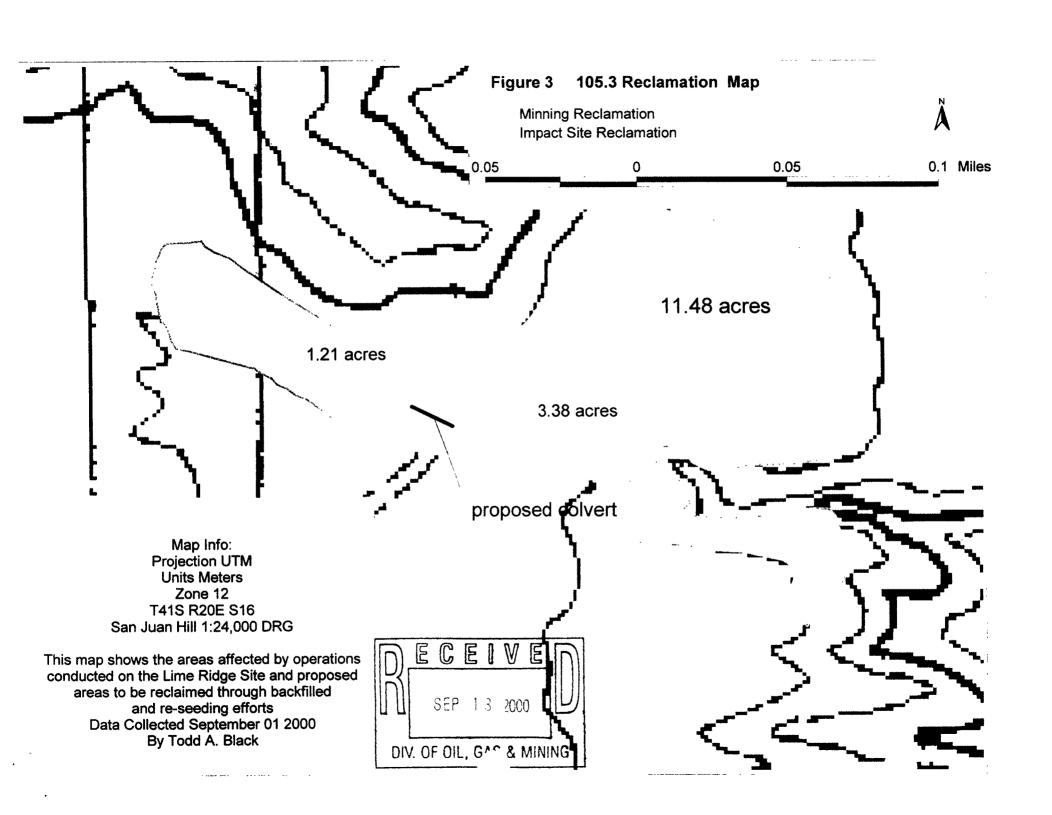
Appendix 4 Addresses item 109.2/109.3 - Wildlife Habitat and endangered species and existing soil and plant resources.

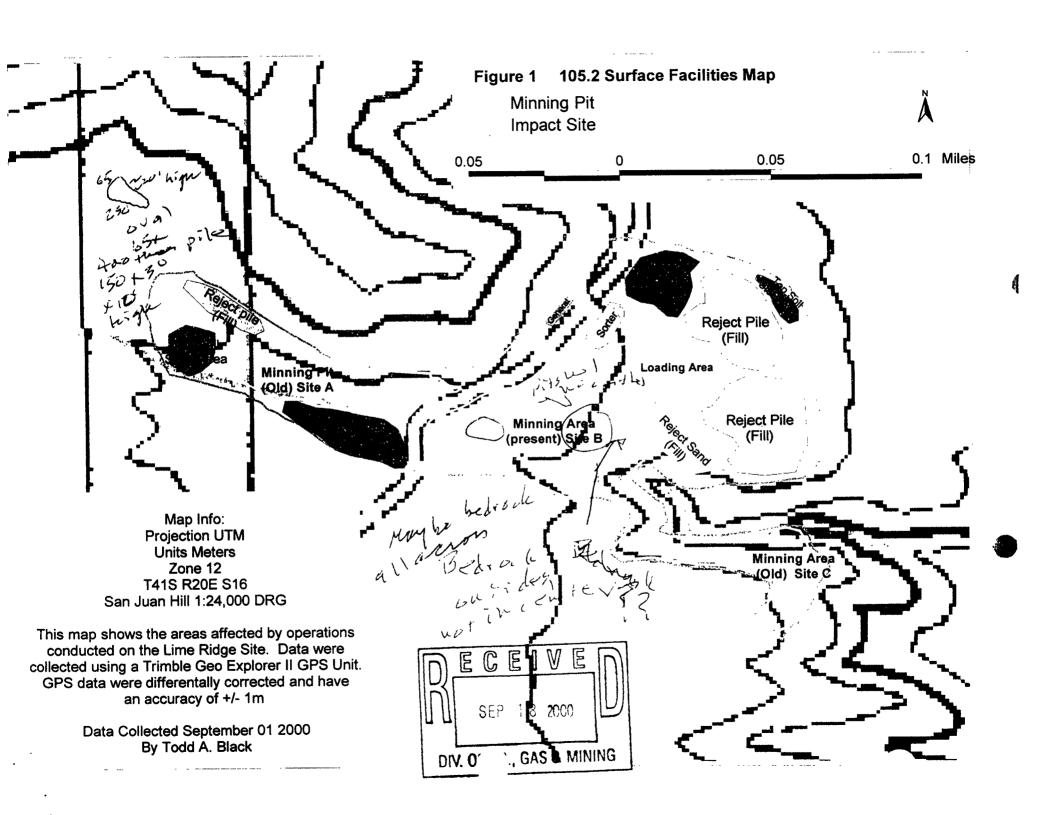
Describe the impacts on wildlife habitat associated with this operation. Describe any impacts to big game species found in the area. Describe any impacts to riparian areas. Describe any impacts this operation will have on waterfowl (fly-over, temporary resident or permanent resident). List any threatened or endangered species and thir habitats. Describe measures to be take to minimize or mitigate any impacts on wildlife or endangered species.

See Appendix 3 and associated table for a list of wildlife species recorded on site.

Very few mamalian or avian species were recorded on the site at the time of the survey. There appears to be little use of big game or other wildlife species on the proposed impact site. The area is sparsley vegetated and offers little in the way of food or cover for many wildlife species. There are no riparian areas within 500 feet of the proposed impact site and no wetlands that would affect any waterfowl species. From observations made during this assessment no threatened or endangered species of wildlife or plants were observed on the proposed impact site or the adjacent properties. Whereas no T&E species were recorded during this period, an impact on any T&E species on the proposed impact site is unlikely to occur and a finding of no significant impact on any threatened or endangered species of flora or fauna can be implied.

Methods to reclimate the site with suitable forage species has been outlined in appendix 2 and all possible efforts will be taken to assure the area is reseeded with a native seed mixture similar to existing conditions and those which will benefit local populations of wildlife.





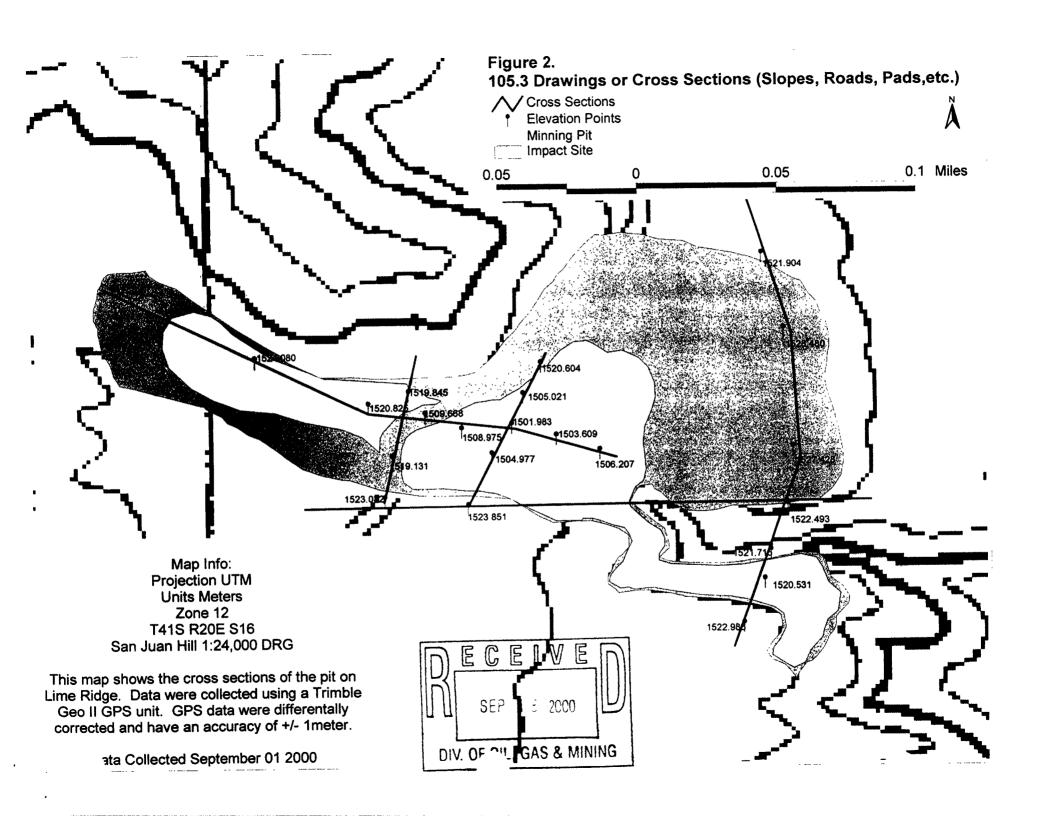
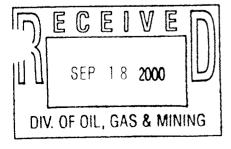


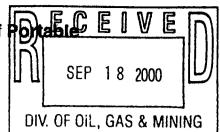


Figure 4. Picture shows current mining activities and water, which collected in mining pit after a previous heavy rain shower.





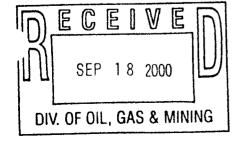
Utah Division of Air Quality Notice of Temporary Relocation of Equipment Form 15a SEP 18 2000



1.Contact Name	ry Holliday		
2.Company Name Ho	Hiday Construction, Inc.		
Mailing Address ρ_{00}	Box 502		
city, state, zip	inding Litah 84511		
phone 43	5-678-2028		
	Proposed New Relocation Site:		
3. Site address and brief directions			
4. Closest City: Bluff	5. County: San Juan		
6. Approximate distances from center of plant location to: Closest house/business 10 m.les National Park 35 m.les which National Park? Nat' Bridges Other air pollution sources (and their names) within 1.5 miles from the plant as of today: (include aggregate plants, asphalt plants, concrete batch plants, and other construction sources)			
Distance to nearest property bo	oundary 9 miles to nearest deeded property		
7. In an effort to coordinate state and local regulations, all Temporary Relocations should be accompanied with a Conditional Use Permit from the applicable county or city zoning department Date Conditional Use Permit issued: (enclose copy with relocation notification)			
 8. Attach a site diagram to this form showing the dimensions, general pit location and the equipment location on site to scale (include locations of items filled out in 4. and 6.). 9. Total hours of operation per 24 hour period 10 hrs per week starting at 8:00 ampm ending at 5:00 am/om 10. Maximum hourly production rate for project 30-35 Ton per wr. 			
11.a. Expected Startup Date	e: 11.b. Expected Completion Date: Nov. 30, 2600		
12. Existing Approval Order(s) und copy of the AO(s) to this form)	der which the equipment will operate at the proposed site (attach a : (e.g.,BAQE-XXXX-XX or DAQE-XXXX-XX)		

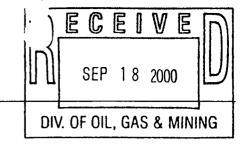
same site for any equipment (including equipment listed in this form) owned by the same company: (A complete list is required: Attach additional sheets if necessary)
Equipment 1-980 F. Rubber Tire lander Startup: _/_/ Completion: 11/30/00
1-980 C Rubber Tire Loader 1-966
Rubber Tire Loader, 1 - Dae Woo excavator
1-Hydraulic Hammer on Dacwoo
Equipment 1 - Air Track Drill Startup: _/_/ Completion: 11/30/00
1- Rip Rap Machine Wiscreen -
Feeder & Delivery Belts 1- Generator
The Devictation
15. Fugitive Dust Control Plan (FDCP) Instructions: All sources are required to control fugitive dust from the processes listed below. For processes covered in an Approval Order (AO), the source may be required to adopt additional control measures beyond that stated in the AO based on site-specific conditions. Fill in "NA" if the process is not applicable to your temporary relocation. For proposal to operate the process under the controls stated in the AO, fill in the applicable "AO condition number". For proposal to operate the process under additional sentrols beyond that stated in the AO, fill in the applicable "AO condition number" and state additional fugitive dust control measures that are proposed. If the process fisted is applicable but is not covered in the AO, state the proposed fugitive dust control measures (attach additional sheets as necessary). The Division of Air Quality (DAQ) may require the sources to modify the proposed FDCP prior to issuing the Temporary Relocation Approval (TRA) totter. The FDCP for each location must address
the following, if applicable;
1. Material storage
2. Material handling Freeding Rip Rose Machine with loader
3. Material Processing 34 V Ria Rain
4. Road ways and yard areas <u>County Road</u> 5. Loading and dumping materials With Rubber Tive loaders
6 Hauling materials 5 Trucks houling Metages
7. Drilling, blasting, and pushing operations Dr. Aing I he per wk. about 12 holes 12th deep
8. Clearing and leveling NA O 9. Earth moving and excavation Moving Rock with Rubber Tire Loaders
10 Tailing piles and pends
11. Exposed surfaces Approx 4 acres of the Mining Area See attached Mag
12. Surface mining operations 4 acres of Mising 14 acres of Stockpile
16. Owner/Operator Representative
Jan 20/15-00
Signature Date
Date
Instructions Notices of temporary relocations should be submitted at least two weeks in advance of the relocation of equipment. All temporary relocations will be restricted to a consecutive 180-day period of operation. All equipment that the source plans to relocate must be fisted in a valid Approval Order from the Division of Air Quality (DAQ) prior to submitting this form. Please attach a copy of the relevant Approval Order(s), which approves the equipment in item 10. of this form. Call the DAQ at (801) 536-4000 if you have problems or questions when completing this form. We will be glad to help.
For Sources that have Consolidated Generic Approval Order (To obtain a Consolidated Generic Approval Order, Coutact the NSR Section at (801) 536-4000
Enhanced Emissions Control Mensures (FECMs): Enhanced control measures are those omission control measures that the source may be required to adopt during temporary relocation to a site. DAQ may require the source to adopt EECMs white operating in cortain locations where particulate emissions are of more uniquent (etg., Sall Lake, Utah, and Weber Counties, which are non-allainment areas for PM ₁₀). The source may voluntoor to emissions are of more uniquent (etg., Sall Lake, Utah, and Weber Counties, which are non-allainment areas for PM ₁₀). The source may voluntoor to the emissions of the source is emissions controls required the property of declarating the property of the end of the property of the source is welcome to contact an engineer at the New Sputce Review Section, DAQ, to discuss further options (altach additional shoots for other EECMs if nocossary). Liquid Boads (circle politine if or 2 and/or 3)
DIV. OF OIL, GAS & MINING SEP 1 8 2000 Div. of Oil, GAS & MINING Div. of Oil, G

Attachment 2. Resume and qualifications of Todd A. Black



TODD A. BLACK

1407 West North Temple SLC, UT 84140 Wk.(801)220-4305 Todd.Black@PacifiCorp.com



OBJECTIVE

Private land management company or consulting firm that will allow me continued work with wildlife and vegetation interactions, issues, and modeling using a variety of GIS, GPS, modeling and other computer tools to address wildlife issues.

EDUCATION

MS candidate, USU Department of Geography and Earth Resources, GIS and Remote Sensing. Graduation December 1999, GPA 3.7/4.0.

B.S. in Wildlife Biology. Brigham Young University, Provo, Utah. Graduation August 1995. Major GPA 3.0/4.0.

EXPERIENCE

RS/GIS Specialists Wildlife Biologists PacifiCorp/Scottish Power November 1999 to present. Environmental Services Division. Duties include; GIS administrator for ESD, oversee GIS needs and work on various projects, writing reports, Timber surveys, T&E species clearance in areas to be logged, monitoring various wildlife populations on properties, and working with powerline/raptor issues. Other duties include; upkeep of Sun UNIX operating systems, basic systems administration, digitizing, map composition, data development and integrity, programming in ARC/INFO and ArcView Software, data query and analysis, satellite imagery manipulation, collection of biological field data, working with state and federal agencies on various issues and projects which PacifiCorp is involved with.

Project Leader/LEMA Center Field Liaison, June 1995 to November 1999. USU Department of Geography and Earth Resources, GIS and Remote Sensing Lab. Duties include; knowledge of Sun UNIX operating systems, basic systems administration, digitizing, map composition, data development and integrity, programming in ARC/INFO and ERDAS IMAGINE, data query and analysis, satellite imagery manipulation and classification, gathering filed vegetation training sites, writing HTML's working with state and federal agencies in the development of GIS related projects and the use of GIS software, and other work related to GIS and remote sensing applications. Specific projects included; modeling sharp-tailed grouse winter and summer habitat in Southern Idaho, GAP analysis and wildlife species distribution Utah and Nevada, Refining the Idaho GAP analysis data to look at sagebrush communities at a fine scale for sage grouse in Southern Idaho. Creating the BLM fire dispatch interactive CD-ROM

Environmental Consultant, BIO/WEST Logan, Utah. May 1996 to present. Biological assessment work for environmental projects throughout the western United States. Duties included; breeding bird census, southwestern willow flycatcher surveys, aerial big game counts, desert fisheries work, surgical assistant putting sonic pit tags in fish, sonar underwater telemetry, field vegetation classification, GPS data collection, field crew supervision, aquatic insect sampling, four wheel drive operation, and stream bed loading and morphology work.

Environmental Consultant, June 1995. Environmental Science and Research Foundation. Idaho Falls, Idaho. Duties included; conducting a breeding bird survey along 13 routes on the Idaho National Engineering Lab and analysis of data and generation of a report.

1 of 3 9/9/00 5:05 PM

Environmental Consultant, June-August 1994. SWCA, Salt Lake City, Utah. Biological assessment work for projects in Blanding, Monticello, and Panguitch, Utah. Duties included; raptor surveys, Utah prairie dog surveys, burrowing owl surveys, and generation of reports.

Field Wildlife Biologist, May-September 1993-94. Utah State University, Logan, Utah. Contractwork with the USDA Forest Service, mantillas National Forest. Duties included; following strict protocol for breeding bird surveys for neo-tropical birds, three-toed woodpecker surveys, northern goshawk surveys, vegetation classification, generation of report and species list to the Forest Service, and the supervision of field crew members.

Biological Technician, May-September 1992. USFS, Heber Ranger District, Heber, Utah. Duties included; field crew supervision, revegetation and improvement of riparian areas in the Strawberry Valley, trout gill netting and necropsy, installation of wildlife guzzlers, ATV operation and training, fire fighting, and fire crew supervision.

Environmental Consultant, July 1992. Contract work with the USDA Forest Service, HeberRanger District. Duties included; the use of call tapes to locate and census the northern goshawk in several areas scheduled to be logged and the writing of an environmental assessment report.

Biological Technician, June 1991-August 1992. State of Utah Division of Wildlife Resources in Northeastern Utah. Duties included; raptor surveys, peregrine falcon nest site location and monitoring, fish elector-shocking, big game depredation counts, and generation of reports.

COMPUTER SKILLS

Platforms Sun UNIX and NT work Stations, Macintosh, PC's. Software expertise; DOS 6.0, MS Windows 95, ARC/INFO 8.01, Imagine 840, Arcview 3.2 Certified, Microsoft Office programs (Word, Excel, Access, Powerpoint), Adobe Photoshop, Illustrator & Pagemaker, Correl WordPerfect 8.0, Quatro-pro, Paradox, SAS, Minitab, and PFINDER.

OTHER SKILLS

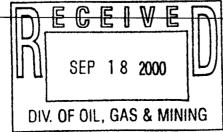
Trimble Geo-Explorer GPS operation, Telonics telemetry operation, orienteering, under watersonic telemetry, operation of four-wheel-drive vehicles in snow, mud, and rocky roads, ATV' operation, fire fighting, heavy equipment operation, plumbing, and basic handyman.

ACTIVITIES

Utah Wildlife Society Utah Society for Range Management, American Ornithological Union, Mule Deer Foundation. Missionary, The Church of Jesus Christ of Latter-day Saints, 1985-1987. Eagle Scout, received September, 1983.

INTERESTS

Birding, camping, fly fishing, archery, archeology, hunting, backpacking, hiking, outdoor photography, and reading.





P.O. Box 188 • 835 East Highway 666 Monticello, Utah 84535 • 435-587-3230

December 6, 2000

Mr. Jerry Holliday Holliday Construction Post Office Box 502 Blanding, Utah 84511

Dear Jerry.

As per your request to comment about any safety concerns San Juan County has regarding your limestone pit being adjacent to our County Road #2351, I submit the following:

I met with you at your pit on December 6, 2000 and observed the road in relation to your pit. I did have a concern with the vertical drop into the pit from the edge of the road. I would be more concerned with people driving at night. You had placed either a berm of rock or large rocks along the edge of the road to prevent anyone from driving into the hole or pit. I believe this is a solution to this concern.

You told me how you either parked equipment or left large rocks adjacent to the road when you left at night to make sure no vehicles could get near the vertical drop off areas. I had no problems with this either.

The last item we discussed was the road itself. You indicated to me that in a week or so, the county road would be widened to about 20' from its present width of about 12 feet.

Therefore, taking in consideration the very low volume of traffic on this road, and our discussions of the present condition along with your future plans, I do not see this as being a safety problem.

Sincerely.

Douglas E. Pehrson - San Juan County Engineer

San Juan County Road Department

DEC 1 3 2000
DIV. OF OIL, GAS & MINING